

Please cancel Claims 1, 3, 4, 8-10, 12-15, and 18-23 and add new Claims 24-37 as shown in this complete set of all pending Claims:

1. (Canceled)

2. (Withdrawn) The chip as recited in claim 1 wherein the radio frequency signals are modulated in a format selected from the group consisting of parallel formatted signal groups and serial-formatted signal groups.

3-4. (Canceled)

5. (Withdrawn) The chip as recited in claim 4 wherein the analyzer provides a parallel-data signal group for each demodulated signal in a series of demodulated signals.

6. (Withdrawn) The chip as recited in claim 1 wherein the group of components further includes:

a modulator for modulating a radio frequency signal with signals from the plurality of components; and

a transmitting unit for applying the modulated radio frequency signals to the antenna.

7. (Withdrawn) The chip as recited in claim 6 wherein the transmitting unit is coupled to a second antenna.

8-10 (Canceled)

11. (Withdrawn) The method as recited in claim 9 wherein the radio frequency signal transmits signal groups formatted in a parallel format.

12-15 (Canceled)

16. (Withdrawn) The system as recited in claim 15 wherein the second integrated circuit includes a transmitting unit, and wherein the first integrated circuit chip includes a receiving unit, the first integrated circuit chip receiving unit adapted to receive the signals from the second integrated circuit transmitting unit.

17. (Withdrawn) The system as recited in claim 15 wherein the signals groups are transmitted in a format selected from the group consisting of serial-formatted groups and parallel-formatted signal groups.

18-23. (Canceled)

24. (New) An integrated circuit board, the board comprising:

a multiplicity of semiconductor chips for processing signal groups, wherein a plurality of semiconductor chips exchange signal groups using wireless techniques, the multiplicity of semiconductor chips including:

    a first semiconductor chip on the circuit board operable to receive a signal group from a second semiconductor chip on the circuit board, the first semiconductor chip having:

        an antenna for receiving wireless signals transmitted from the second semiconductor chip;

        a wireless signal receiver coupled to the antenna, the receiver operable to detect the wireless signals; and

        a demodulator coupled to the receiver, the demodulator operable to recover the signal group from the wireless signals.

25. (New) The integrated circuit board as recited in claim 24 wherein signals received by the wireless signal receiver are modulated with a modulation from the group consisting of amplitude modulation and frequency modulation.

26. (New) The integrated circuit board as recited in claim 24, wherein the first semiconductor chip further includes an analyzer, the analyzer operable to receive the signal group from the demodulator and to decode the signal group into a plurality of logic signals.

27. (New) The integrated circuit board as recited in claim 24 wherein the wireless signals include a header portion, a data portion, and a tail portion.

28. (New) A method for transferring logic signal groups between semiconductor chips located on a same board, the method comprising:

modulating and transmitting a wireless signal by a first semiconductor chip, the wireless signal being modulated with a logic signal group generated by the first semiconductor chip; and

receiving and demodulating the wireless signal by a second semiconductor chip to reproduce the logic signal group for use by the second semiconductor chip.

29. (New) The method as recited in claim 28 wherein the wireless signal transmits signal groups formatted in a serial format.

30. (New) The method as recited in claim 28 wherein the wireless signal transmitting the signal groups is modulated with a modulation selected from the group consisting of amplitude modulation and frequency modulation.

31. (New) The method as recited in claim 28 wherein the wireless signal comprises an encoded pattern of signals produced by the first semiconductor chip.

32. (New) The method as recited in claim 31 wherein the receiving and demodulating of the wireless signal provide a decoded signal representing the pattern of signals produced by the first semiconductor chip.

33. (Currently Amended) A system for transferring data signal groups between semiconductor chips located in close proximity, the system comprising:

a first semiconductor chip comprising:

a first processing unit; and

a wireless transmitting unit coupled to the first processing unit and operable to receive a signal group therefrom, the wireless transmitting unit coupled to an antenna within the first semiconductor chip and operable to transmit the signal group from the first processing unit; and

a second semiconductor chip located in close proximity to the first semiconductor chip, the second semiconductor chip comprising:

a second processing unit; and

a wireless receiving unit coupled to the second processing unit, the wireless receiving unit coupled to an antenna within the second semiconductor chip and operable to receive the signal group from the transmitting unit and to provide the signal group to the second processing unit.

34. (New) The system as recited in claim 33 wherein the first semiconductor chip further comprises a synthesizer and the second semiconductor chip further comprises an analyzer for processing a serially transmitted signal group.

35. (New) The system as recited in claim 33 wherein the first semiconductor chip is located on a first circuit board and the second semiconductor chip is located on a second circuit board, the first circuit board and the second circuit board being in a stacked configuration in close proximity.

36. (New) The system as recited in claim 33 wherein the first semiconductor chip and the second semiconductor chip are positioned on a same board.

37. (New) The system as recited in claim 33 wherein the transmitted signal group includes a header portion, a data portion and a tail portion.